

Fresno Transit Master Plan Project

Technical Advisory Meeting

June 13, 2007



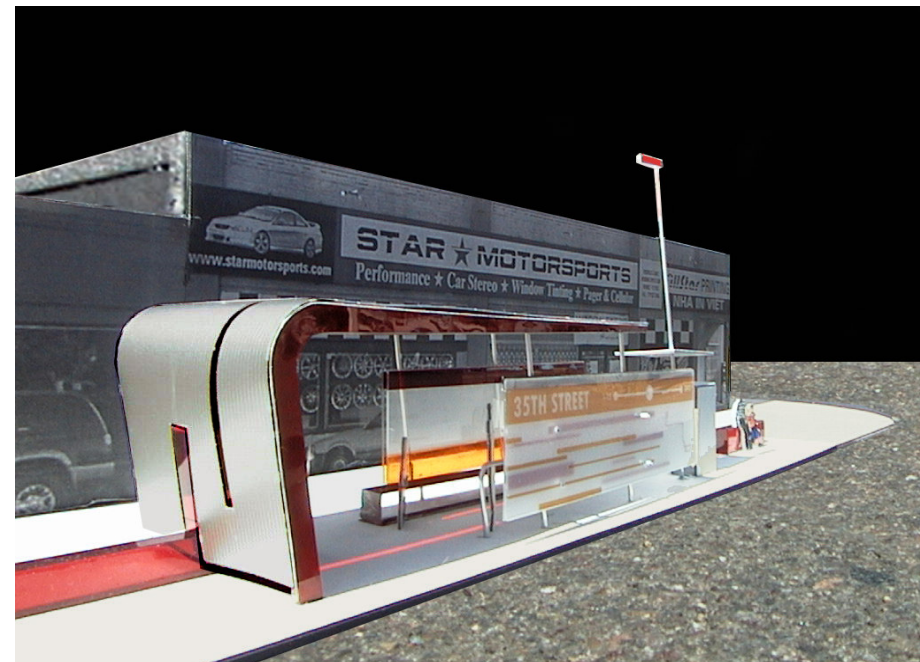
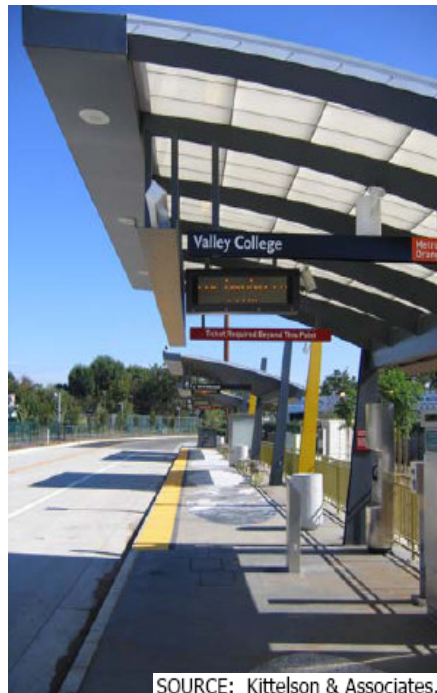
Technical Advisory Committee (TAC)

June 13, 2007

- Public Presentations
- Executive Minutes of April 25, 2007
- Project Progress and Overview
- Preliminary Ridership Forecasts
- BRT Implementation Alternatives
- Public Meeting: Master Plan Open House

Elements of Bus Rapid Transit (BRT)

Substantial transit stations



Elements of Bus Rapid Transit (BRT)

Traffic signal priority / pre-emption



Elements of Bus Rapid Transit (BRT)

Low-floor vehicles / level boarding



Elements of Bus Rapid Transit (BRT)

Branding / Marketing



SOURCE: Regional Transportation Commission of Southern Nevada

Elements of Bus Rapid Transit (BRT)

Curb Extensions

- Enlarged space for sidewalk boarding.
- Allows bus to stop in its own lane without pulling out from traffic.
- Extensions shorten pedestrians crossings.



Elements of Bus Rapid Transit (BRT)

10 minute peak / 15 minute off-peak
headways





Kimley-Horn
and Associates, Inc.

Amenities Provided by BRT

Real-time bus information



Amenities Provided by BRT

Off-vehicle automatic fare collection



Minimizes dwell times at stations.

Fare collection for BRT could be similar to proof-of-payment on light rail or trolley systems.

Amenities Provided by BRT

- Community maps / compass rose



Additional Amenities Provided by BRT

- Raised curb for level boarding
- Additional seating at station
- Artwork / Landscaping
- Bicycle racks
- Public address system
- Enhanced pedestrian access



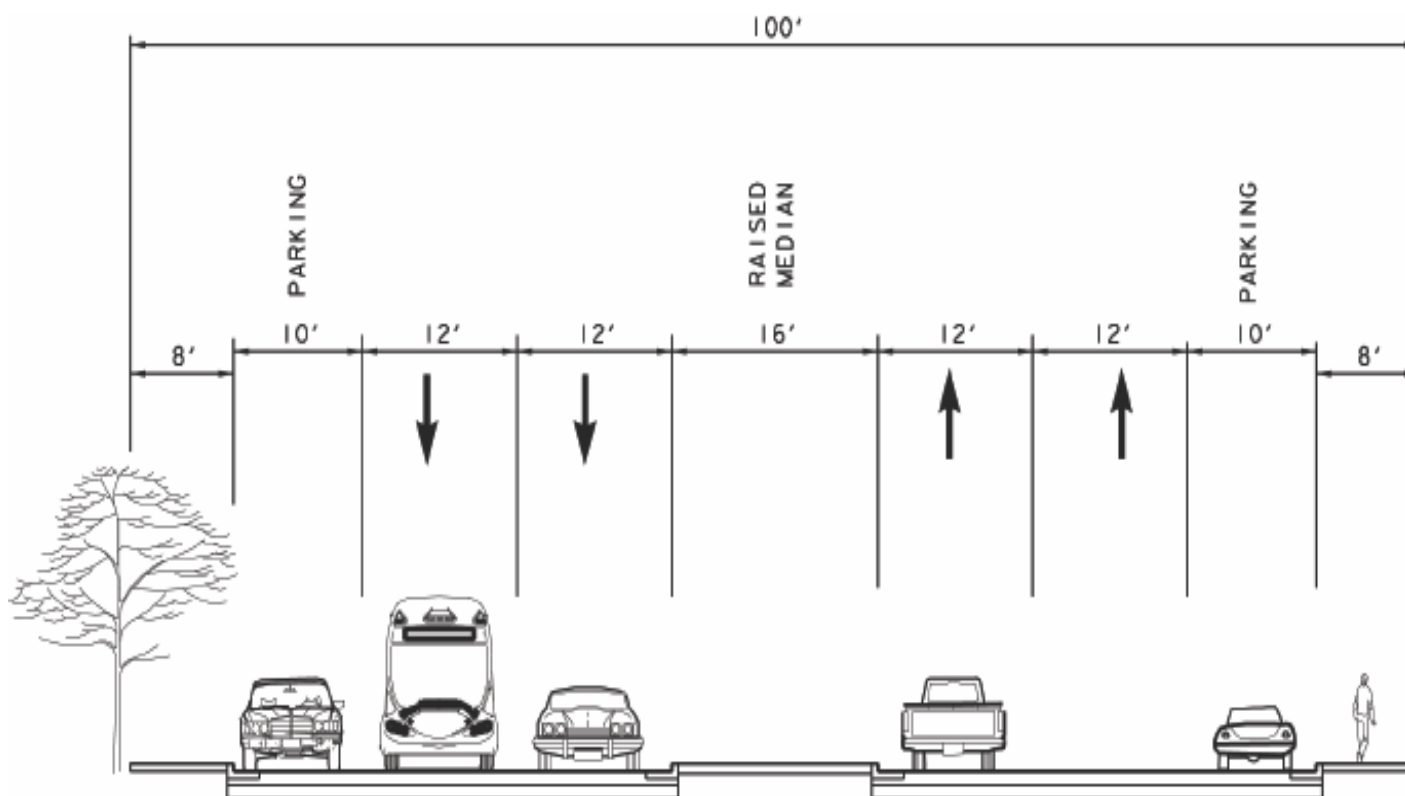
BRT Implementation Alternatives

BASIC INVESTMENT

1. Substantial Transit Stations/Shelters
2. Real Time Passenger Information
3. Traffic Signal Priority / Signal Coordination
4. Off-board Fare Collection
5. Low-floor Vehicles or Level Boarding
6. Branding
7. 10 peak/15 off-peak headways
8. Queue jumper lanes and minimal dedicated lanes.

BRT Implementation Alternatives

BASIC INVESTMENT



BRT Implementation Alternatives

BASIC INVESTMENT

Street Improvements	\$ 500,000 per mile
Station Costs (Including amenities)	\$ 450,000 per station
Traffic Signal Upgrade	\$ 25,000 per signal
Right-of-Way Acquisition	\$ 20 per SF
Contingency	30%
Environmental Documentation/Design	20%
Construction / Project Management	20%

4 miles, 14 intersections, 8 stations

VENTURA CORRIDOR

~\$9.5-12 million

~\$2.3-3 million / mile

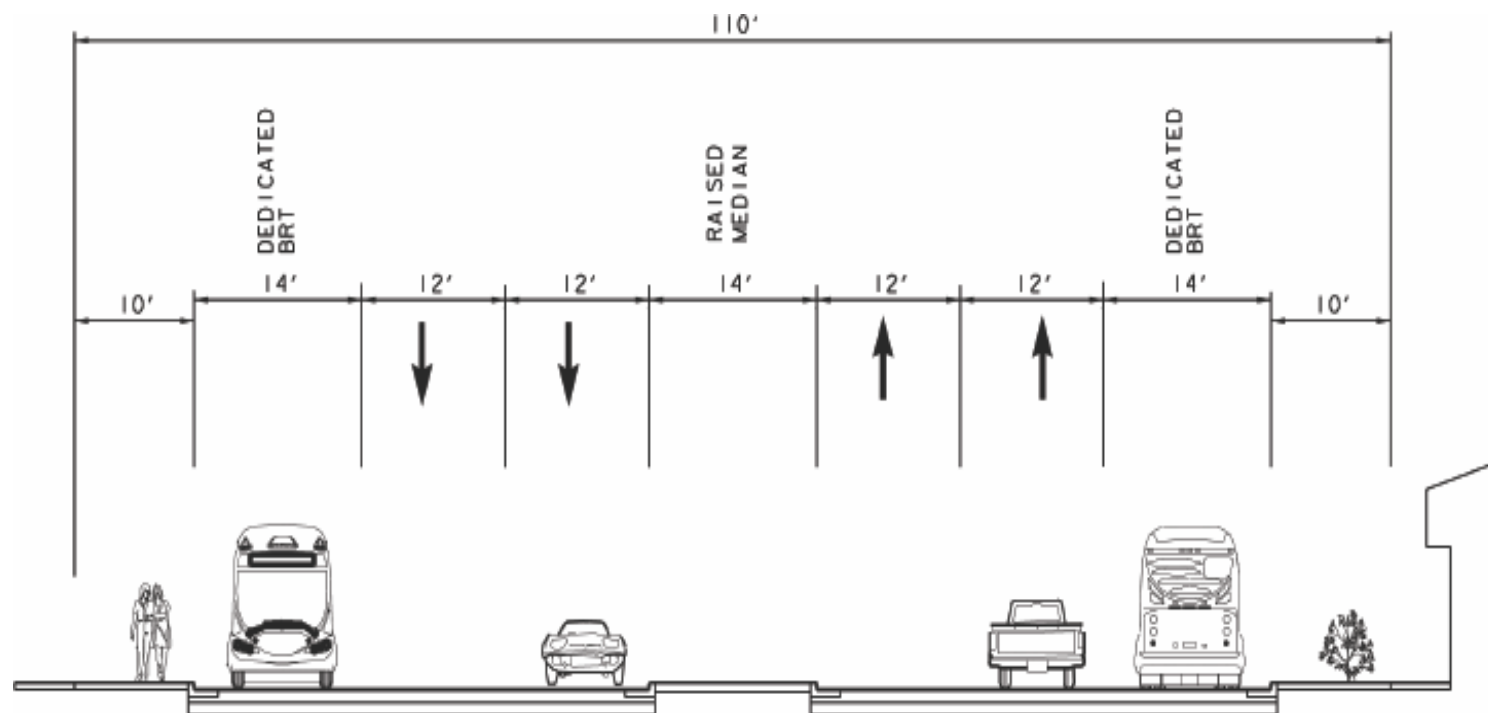
BRT Implementation Alternatives

MODERATE INVESTMENT

1. Dedicated lanes
 - Color paved side-running or median lanes
2. Enhanced station investment
 - Landscaping
 - New paving
 - Way-finding signage
 - Additional lighting surrounding station
3. Amenities for passengers
 - Additional seating
 - Bicycle parking

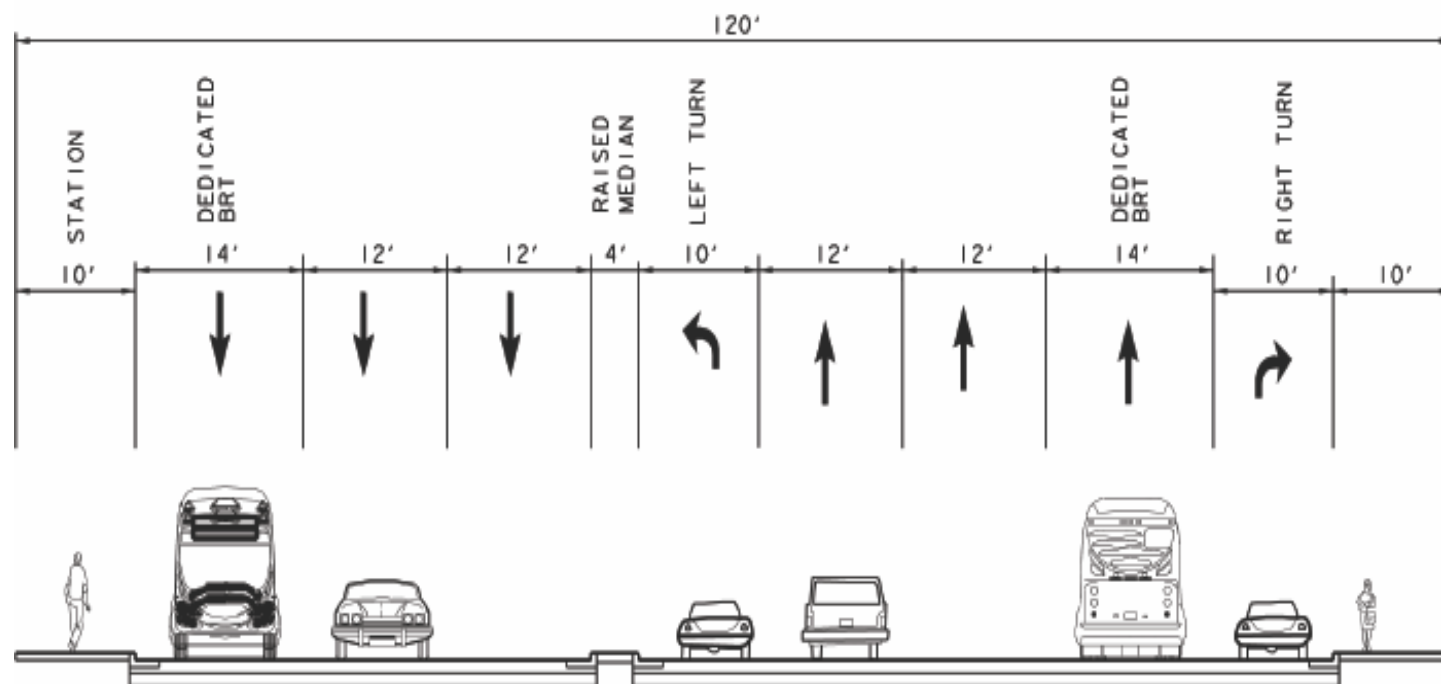
BRT Implementation Alternatives

MODERATE INVESTMENT



BRT Implementation Alternatives

MODERATE INVESTMENT



BRT Implementation Alternatives

MODERATE INVESTMENT

Street Improvements	\$ 1,000,000 per mile
Station Costs (Including amenities)	\$ 600,000 per station
Traffic Signal Upgrade	\$ 25,000 per signal
Right-of-Way Acquisition	\$ 20 per SF
Contingency	30%
Environmental Documentation/Design	20%
Construction / Project Management	20%

4 miles, 14 intersections, 8 stations

VENTURA CORRIDOR

~\$16-20 million

~\$ 4 - 5 million / mile

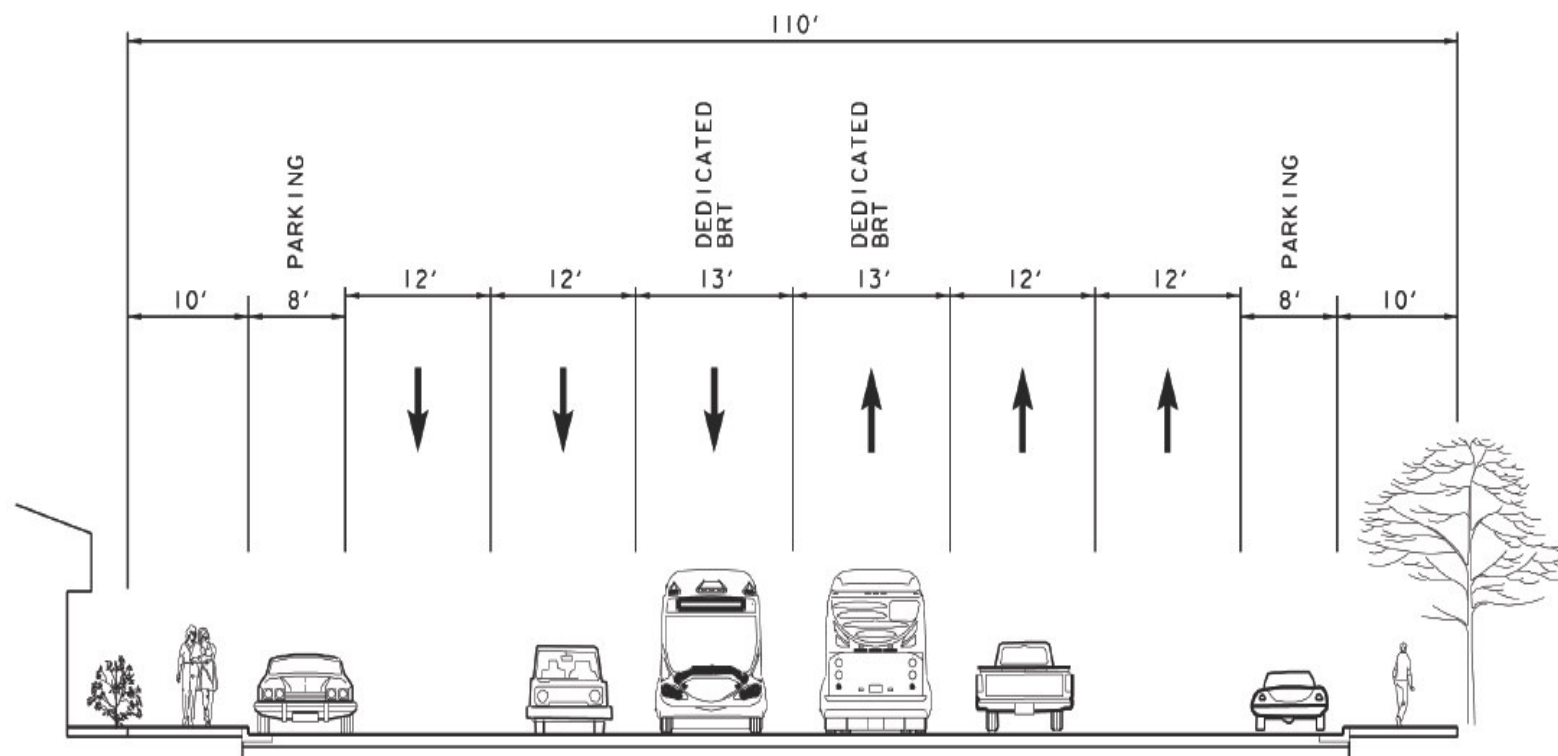
BRT Implementation Alternatives

HIGH INVESTMENT

1. Physically separated lanes
 - Median arterial lanes
2. Major station investment
 - Additional landscaping
 - Special Paving
 - Public art
3. Greater amenities for passengers
 - Information kiosk
 - Newspaper racks

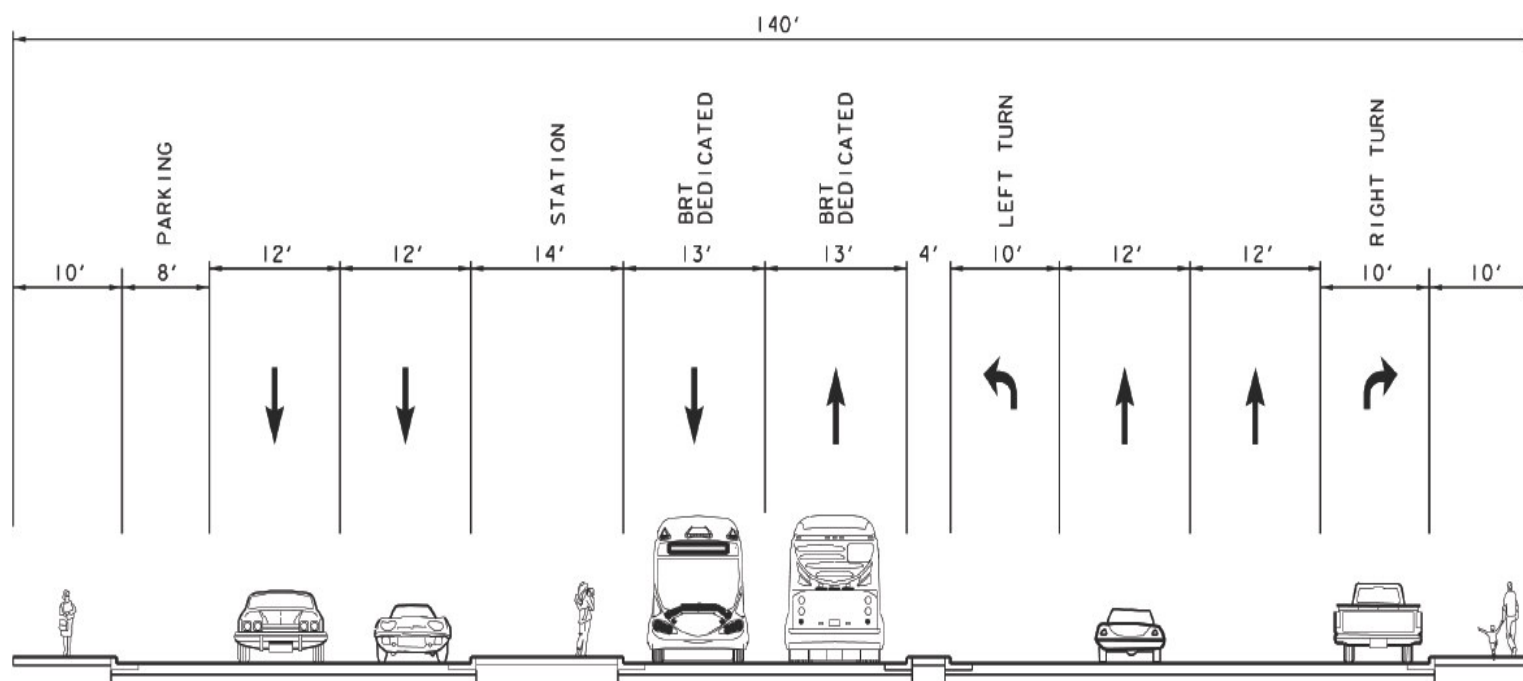
BRT Implementation Alternatives

HIGH INVESTMENT



BRT Implementation Alternatives

HIGH INVESTMENT



BRT Implementation Alternatives

HIGH INVESTMENT

Street Improvements	\$ 3,000,000 per mile
Station Costs (Including amenities)	\$ 1,600,000 per station
Traffic Signal Upgrade	\$ 25,000 per signal
Right-of-Way Acquisition	\$ 20 per SF
Contingency	30%
Environmental Documentation/Design	20%
Construction / Project Management	20%

4 miles, 14 intersections, 8 stations

VENTURA CORRIDOR

~\$46-62 million

~\$ 10 - 15 million / mile

Master Plan Open House

FORMAT

Open format for visitors to freely move between exhibits, diagrams, maps, and video presentation.

Section 1 – Rapid Transit Corridors in Fresno

* Peter Martin
Wilbur Smith and Associates

Section 2 – What is Bus Rapid Transit (BRT)?

* Edgar Torres
Kimley-Horn and Associates

Section 3 – 60' Hybrid BRT Demonstration Vehicle (PENDING)

* Bill Coryell
NABI Bus USA



Kimley-Horn
and Associates, Inc.

